

CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for transmitting voice and data traffic in a wireless communication system, comprising:

generating a first preamble channel, wherein the first preamble channel carries information as to a preamble length;

generating a second preamble channel, wherein the second preamble channel carries a plurality of preamble packets and the length of each of the plurality of preamble packets is carried on the first preamble channel; and

generating a traffic channel, wherein the plurality of preamble packets carried on the second preamble channel are each associated with a packet carried on the traffic channel; wherein the information as to the preamble length is carried by at least a one-bit payload.

2. (Cancelled)

3. (Cancelled)

4. (Original) A method for generating a preamble that is not concatenated to a data subpacket on a traffic channel, comprising:

generating a preamble for transmission on a first non-traffic channel; and

generating a preamble length value for transmission on a second non-traffic channel, wherein the preamble length value is associated with the preamble transmitted on the first non-traffic channel.

5. (Original) The method of Claim 4, wherein the preamble length value is represented by two bits.

6. (Original) The method of Claim 4, wherein the preamble length value is represented by one bit.

7. (Currently Amended) An apparatus for generating a preamble information channel within a wireless communication system, wherein the preamble information channel informs a target station of a length of a preamble transmitted on a separate channel, comprising:

a block encoder configured to receive a symbol and to output a plurality of symbols;

a repetition element configured to receive the plurality of symbols from the block encoder and to output a sequence, wherein the sequence comprises a repeated pattern of the plurality of symbols;

a modulation element configured to receive the sequence and to output an in-phase component and a quadrature component; and

a Walsh covering element for spreading the in-phase component and the quadrature component; wherein the Walsh covering element uses at least a 256-ary Walsh code.

8. (Original) The apparatus of Claim 7, wherein the symbol comprises two bits.

9. (Original) The apparatus of Claim 8, wherein the block encoder outputs three code symbols for the two-bit symbol.

10. (Original) The apparatus of Claim 7, wherein the modulation element performs quadrature phase-shift keying (QPSK) modulation.

11. (Cancelled)

12. (Original) An apparatus for generating a preamble information channel within a wireless communication system, wherein the preamble information channel informs a target station of a length of a preamble transmitted on a separate channel, comprising:

a mapping element configured to receive one bit and to output +1, -1, or 0 accordingly;

a repetition element configured to repeat the output of the mapping element to form a sequence; and

a Walsh covering element for spreading the sequence.

13. (Currently Amended) An apparatus for generating a preamble for transmission on a channel that does not carry traffic, comprising:

a convolutional encoder configured to convolve a preamble sequence;

a repetition element configured to receive the convolved preamble sequence and to output a repeated sequence;

a modulation element configured to modulate the repeated sequence; and

a Walsh covering element for spreading the modulated sequence; wherein the Walsh covering element uses at least a 128-ary Walsh code.

14. (Original) The apparatus of Claim 13, wherein the convolutional encoder is a tail-biting convolutional encoder.

15. (Original) The apparatus of Claim 13, wherein the modulation element performs quadrature phase shift-keying (QPSK) modulation.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)